# **EXHIBIT 1**

## Case 6:21-cv-00811-ADA Document 1-1 Filed 08/06/21 Page 2 of 24 SYNKLOUD TECHNOLOGIES, LLC'S INFRINGEMENT ANALYSIS

#### Infringement Analysis of U.S. Patent Nos. 9,320,536 by SHEnB Co. Ltd. and/or Cartessa Aesthetics, LLC

### (Based on Public Information Only)

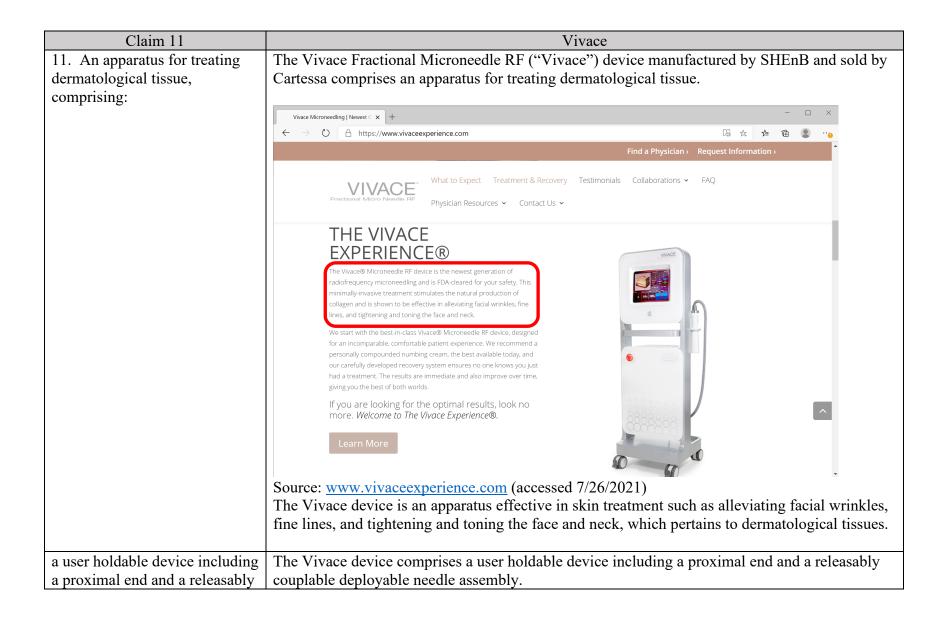
SynKloud Technologies, LLC ("SynKloud") provides this preliminary and exemplary infringement analysis with respect to infringement of U.S. Patent No. 9,320,536, entitled "Method, System, and Apparatus for Dermatalogical Treatment" (hereinafter "the '536 patent") by SHEnB Co. Ltd. ("SHEnB") and/or Cartessa Aesthetics, LLC ("Cartessa"). The following chart illustrates an exemplary analysis regarding infringement by Cartessa's radio frequency microneedling products, including, but not limited to Vivace and VirtueRF (collectively, the "Accused Instrumentalities").

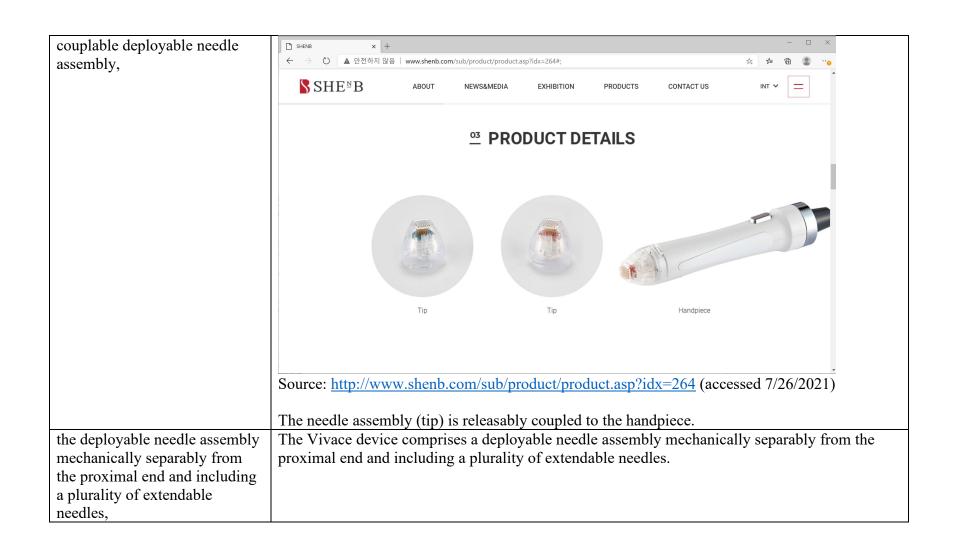
The analysis set forth below is based only upon information from publicly available resources regarding the Accused Instrumentalities, as neither SHEnB nor Cartessa have provided any non-public information.

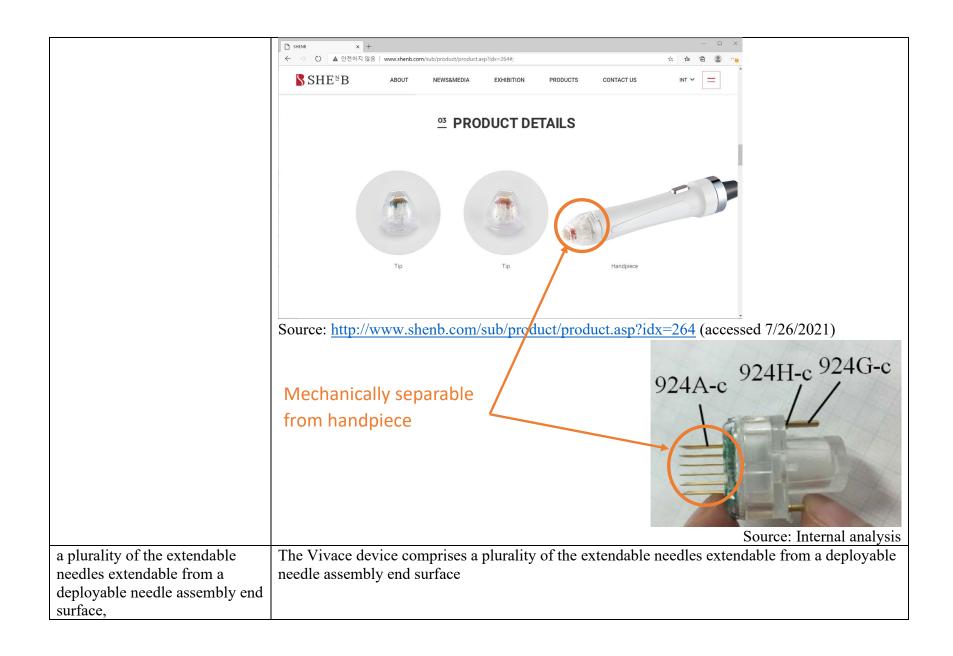
Unless otherwise noted, SynKloud contends that SHEnB and/or Cartessa directly infringes the '536 patent in violation of 35 U.S.C. § 271(a) by selling, offering to sell, making, using, and/or importing the Accused Instrumentalities. The following exemplary analysis demonstrates that infringement. Unless otherwise noted, SynKloud further contends that the evidence below supports a finding of indirect infringement under 35 U.S.C. §§ 271(b) and/or (c), in conjunction with other evidence of liability under one or more of those subsections.

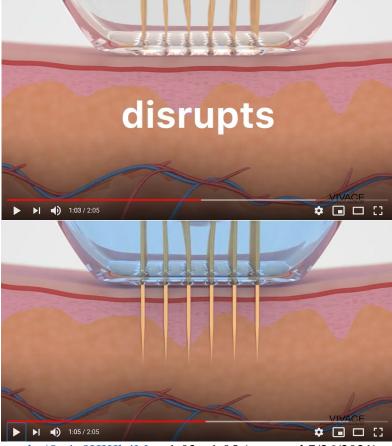
Unless otherwise noted, SynKloud believes and contends that each element of each claim asserted herein is literally met through SHEnB and/or Cartessa's provision of the Accused Instrumentalities. However, to the extent that SHEnB and/or Cartessa attempt to allege that any asserted claim element is not literally met, SynKloud believes and contends that such elements are met under the doctrine of equivalents. More specifically, in its investigation and analysis of the Accused Instrumentalities, SynKloud did not identify any substantial differences between the elements of the patent claims and the corresponding features of the Accused Instrumentalities, as set forth herein. In each instance, the identified feature of the Accused Instrumentalities performs at least substantially the same function in substantially the same way to achieve substantially the same result as the corresponding claim element.

To the extent the chart of an asserted claim relies on evidence about certain specifically-identified Accused Instrumentalities, SynKloud asserts that, on information and belief, any similarly-functioning instrumentalities also infringe the charted claims. SynKloud notes that the present claim chart and analysis are necessarily preliminary in that SynKloud has not obtained substantial discovery from SHEnB and/or Cartessa nor has SHEnB and/or Cartessa disclosed any detailed analysis for their non-infringement positions, if any. Further, SynKloud does not have the benefit of claim construction or expert discovery. SynKloud reserves the right to supplement and/or amend the positions taken in this preliminary and exemplary infringement analysis, including with respect to literal infringement and infringement under the doctrine of equivalents, if and when warranted by further information obtained by SynKloud, including but not limited to information adduced through information exchanges between the parties, fact discovery, claim construction, expert discovery, and/or further analysis.









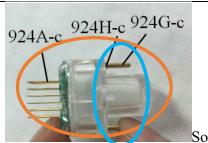
Source: <a href="https://youtu.be/Qa4x9HKIk4M">https://youtu.be/Qa4x9HKIk4M</a> at 1:03 - 1:05 (accessed 7/26/2021)

The Vivees device comprises one of the provingel and and the deployable per

one of the proximal end and the deployable needle assembly including at least one electrical conductor and the other including at least one restorably deflectable electrical contact couplable to the other of the proximal end and the

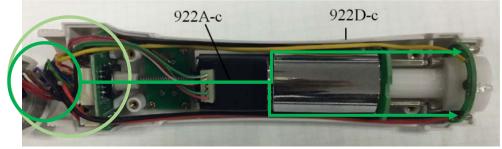
The Vivace device comprises one of the proximal end and the deployable needle assembly including at least one electrical conductor and the other including at least one restroably deflectable electrical contact couplable to the other of the proximal end and the deployable needle assembly at least one electrical conductor.

deployable needle assembly at least one electrical conductor



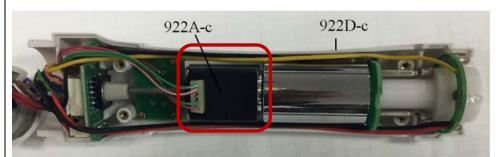
The proximal end includes electrical conductors couplable to the deflectable electrical contacts in the deployable needle a ssembly, in order to apply RF signals to the needles.

Source: Internal analysis

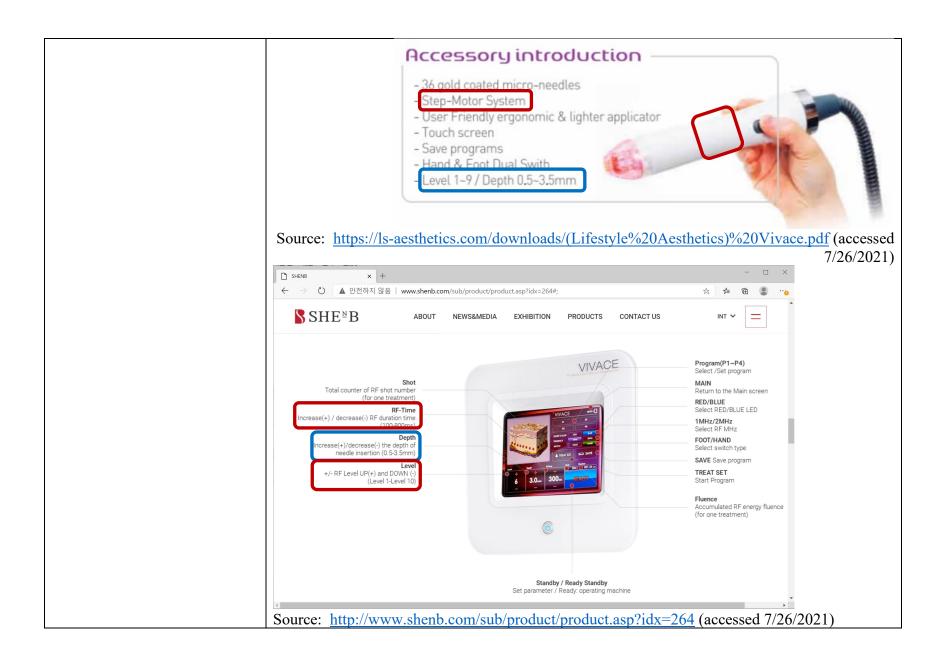


Source: Internal analysis

a motor coupled to a plurality of extendable needles that causes the plurality of extendable needles to extend a desired distance from the needle assembly end surface when the motor is energized with a particular signal; and The Vivace device comprises a motor coupled to a plurality of extendable needles that causes the plurality of extendable needles to extend a desired distance from the needle assembly end surface when the motor is energized with a particular signal.



Source: Internal analysis



a signal generator electrically coupled to the plurality of extended needles to energize the plurality of extended needles. The Vivace device comprises a signal generator electrically coupled to the plurality of extended needles to energize the plurality of extended needles.



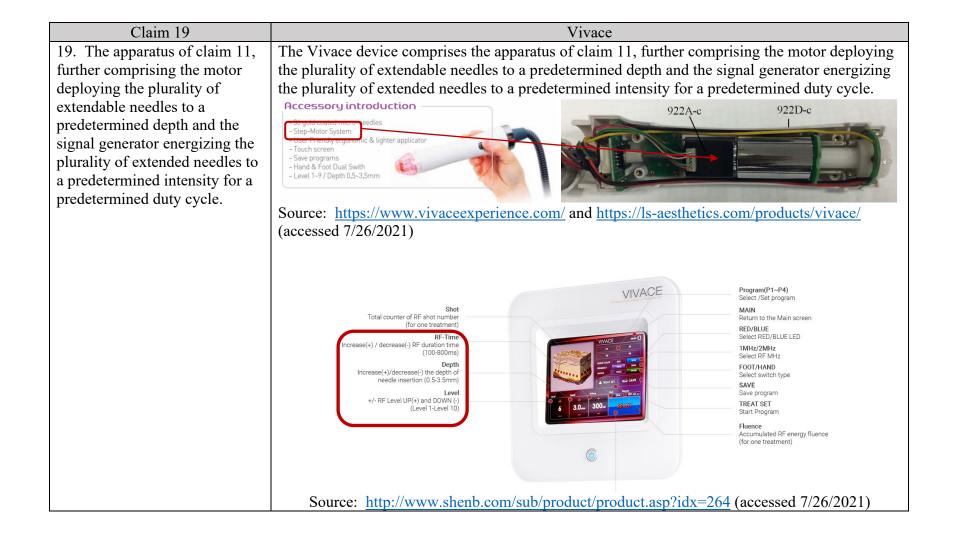
Source: <a href="https://www.vivaceexperience.com/">https://ls-aesthetics.com/products/vivace/</a> (accessed 7/26/2021)

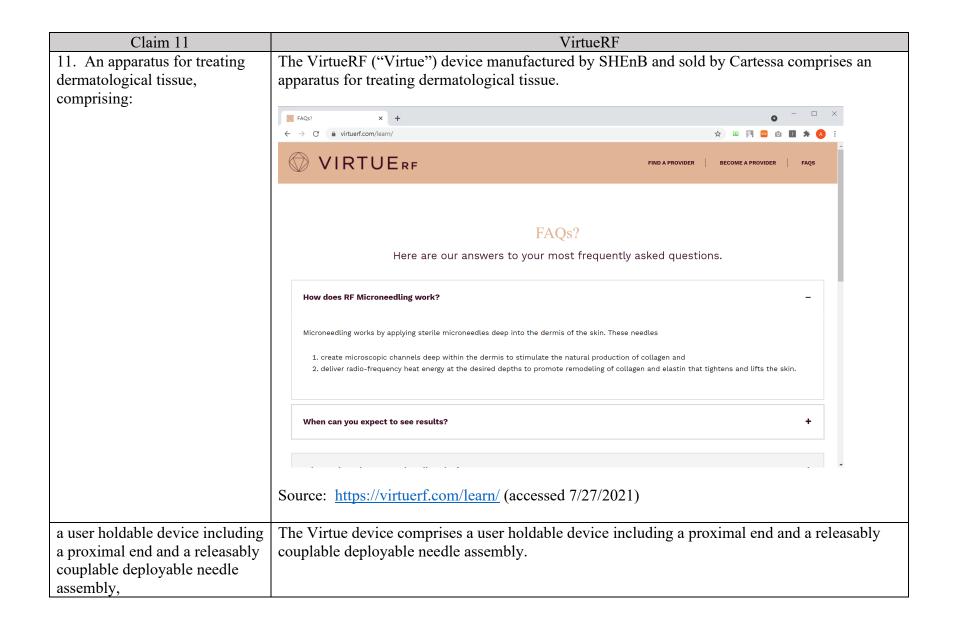
Claim 12	Vivace
12. The apparatus of claim 11 wherein the device proximal end includes an electrical	The Vivace device comprises apparatus of claim 11 wherein the device proximal end includes an electrical connector couplable to the signal generator.
connector couplable to the signal generator.	Source: https://ls-aesthetics.com/downloads/(Lifestyle%20Aesthetics)%20Vivace.pdf (accessed 7/26/2021)

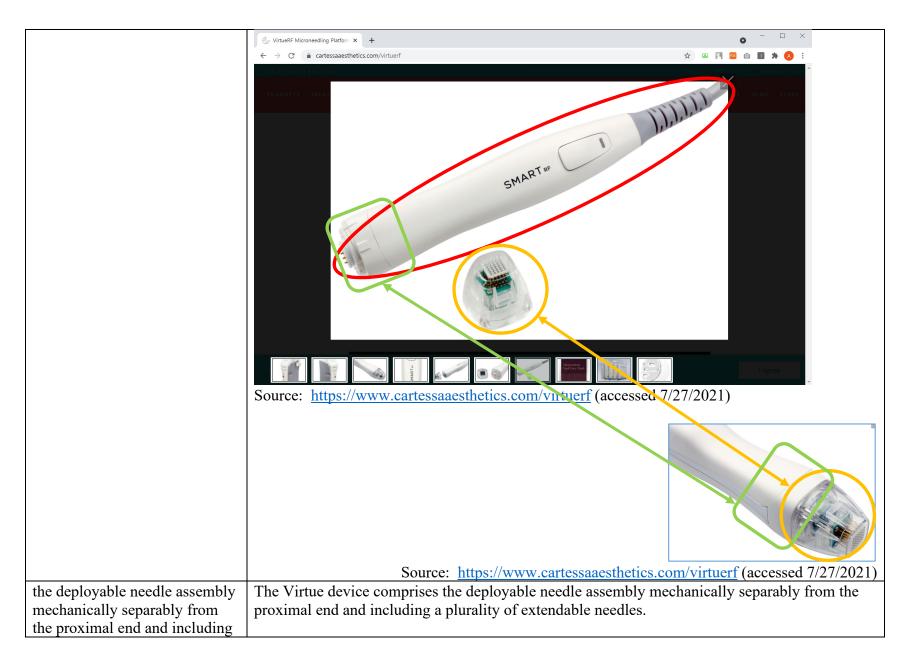
Claim 14 Vivace 14. The apparatus of claim 11, The Vivace device comprises the apparatus of claim 11, wherein the proximal end further wherein the proximal end includes at least one embedded LED therein and the apparatus further including a photonic further includes at least one signal generator electrically coupled to the least one embedded LED, the at least one embedded LED illuminating the deployable needle assembly when energized. embedded LED therein and the apparatus further including a photonic signal generator electrically coupled to the least Accessory introduction one embedded LED, the at least - 36 gold coated micro-needles - Step-Motor System - User Friendly ergonomic one embedded LED - Save programs illuminating the deployable needle assembly when energized. 3. Light emitting diode **BLUE LED** RED LED targets to kill propionibacteri acne or the bacteria associa collagen production moisture levels in skin and improve skin tone & texture. Source: https://www.vivaceexperience.com/ and https://ls-aesthetics.com/products/vivace/ (accessed 7/26/2021)

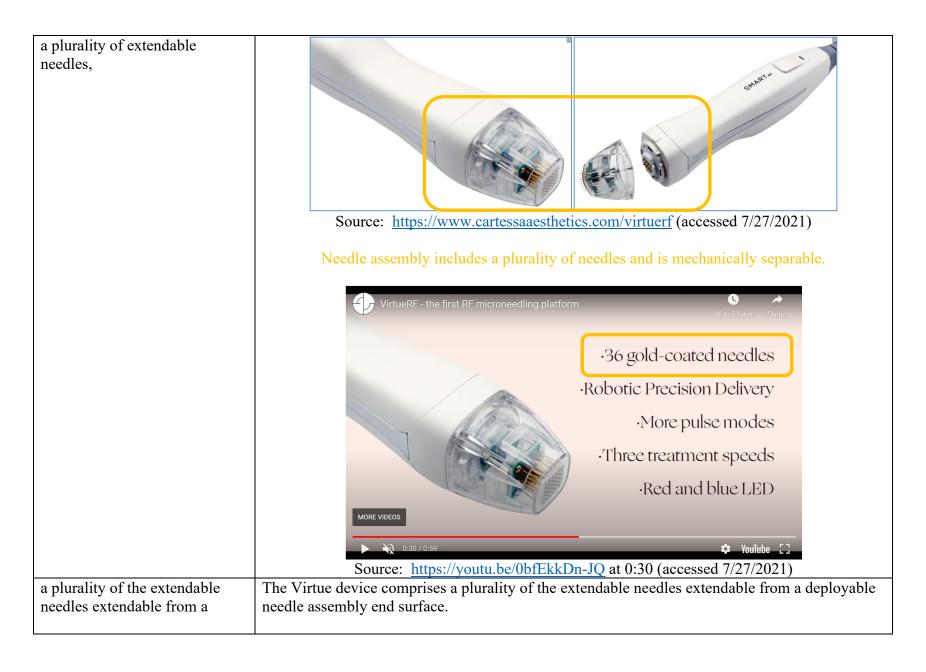
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Claim 16	Vivace
16. The apparatus of claim 11,	The Vivace device comprises the apparatus of claim 11, wherein at least one restorably
wherein at least one restorably	deflectable electrical contact includes a depressible pin.
deflectable electrical contact	
includes a depressible pin.	0216
	924A-c 924H-c 924G-c
	924A-c
	Source: Internal analysis









deployable needle assembly end surface, Needles not extended. Needles extended. Source: https://www.cartessaaesthetics.com/virtuerf (accessed 7/27/2021) 0:13 / 0:17 Source: https://www.youtube.com/watch?v=IBBVFxkRn3M at 0:13–0:17 (accessed 7/27/2021) one of the proximal end and the The Virtue device comprises one of the proximal end and the deployable needle assembly deployable needle assembly including at least one electrical conductor and the other including at least one restorably including at least one electrical deflectable electrical contact couplable to the other of the proximal end and the deployable conductor and the other needle assembly at least one electrical conductor.

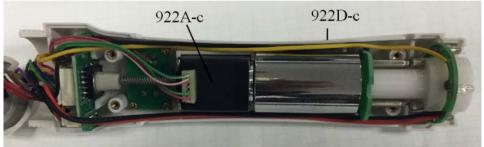
including at least one restorably deflectable electrical contact couplable to the other of the proximal end and the deployable needle assembly at least one electrical conductor



Source: <a href="https://www.cartessaaesthetics.com/virtuerf">https://www.cartessaaesthetics.com/virtuerf</a> (accessed 7/27/2021)

a motor coupled to a plurality of extendable needles that causes the plurality of extendable needles to extend a desired distance from the needle assembly end surface when the motor is energized with a particular signal; and The Virtue device comprises a motor coupled to a plurality of extendable needles that causes the plurality of extendable needles to extend a desired distance from the needle assembly end surface when the motor is energized with a particular signal.

On information and belief, the Virtue device is constructed and operates in a manner similar to the Vivace device as pictured below which comprises a motor coupled to a plurality of extendable needles that causes the plurality of extendable needles to extend a desired distance from the needle assembly end surface when the motor is energized with a particular signal.



Source: Internal analysis of Vivace device

From the SmartRF handpiece's *Robotic Precision Delivery* (*RPD*), to the exclusive post-treatment protocol, the comfort, results and unique experience your patients can expect from VirtueRF microneedling are unmatched. The 36 gold-coated needles of the Smart RF are precisely delivered at a specified depth to provide immediate results with continued improvement over time and a virtually painfree, zero social downtime treatment.

Source: <a href="https://www.cartessaaesthetics.com/virtuerf">https://www.cartessaaesthetics.com/virtuerf</a> (accessed 7/27/2021)

a signal generator electrically coupled to the plurality of extended needles to energize the plurality of extended needles.

The Virtue device needles to energize the plurality of extended needles.

The Virtue device comprises a signal generator electrically coupled to the plurality of extended needles to energize the plurality of extended needles.



Source: <a href="https://www.cartessaaesthetics.com/virtuerf">https://www.cartessaaesthetics.com/virtuerf</a> (accessed 7/27/2021)

Claim 12	VirtueRF
12. The apparatus of claim 11	The Virtue device comprises the apparatus of claim 11, wherein the device proximal end
	includes an electrical connector couplable to the signal generator.
wherein the device proximal end includes an electrical connector couplable to the signal generator.	includes an electrical connector couplable to the signal generator.
	T SAME TO SAME
	Source: <a href="https://www.cartessaaesthetics.com/virtuerf">https://www.cartessaaesthetics.com/virtuerf</a> (accessed 7/27/2021)

### Claim 14 VirtueRF 14. The apparatus of claim 11, The Virtue device comprises the apparatus of claim 11, wherein the proximal end further includes at least one embedded LED therein and the apparatus further including a photonic wherein the proximal end further includes at least one signal generator electrically coupled to the least one embedded LED, the at least one embedded embedded LED therein and the LED illuminating the deployable needle assembly when energized. apparatus further including a photonic signal generator electrically coupled to the least one embedded LED, the at least one embedded LED illuminating the deployable needle assembly when energized. Source: <a href="https://www.cartessaaesthetics.com/virtuerf">https://www.cartessaaesthetics.com/virtuerf</a> (accessed 7/27/2021)



### Claim 19

19. The apparatus of claim 11, further comprising the motor deploying the plurality of extendable needles to a predetermined depth and the signal generator energizing the plurality of extended needles to a predetermined intensity for a predetermined duty cycle.

### VirtueRF

The Virtue device comprises the apparatus of claim 11, further comprising the motor deploying the plurality of extendable needles to a predetermined depth and the signal generator energizing the plurality of extended needles to a predetermined intensity for a predetermined duty cycle.



Source: https://youtu.be/m9x-Oh4fsds at 0:18 (accessed 7/27/2021)

Caveat: The notes and/or cited excerpts utilized herein are set forth for illustrative purposes only and are not meant to be limiting in any manner. Further, to the extent any error(s) and/or omission(s) exist herein, all rights are reserved to correct the same.